

THAT WHICH IS CLAIMED:

1. A fiber optic cable comprising:

at least one optical waveguide;

at least one strength member, the at least one strength

5 member is a material having an average residual angle in the range of about 30 degrees to about 65 degrees during a bending test using a mandrel to wire ratio (D/d) of about 200; and a jacket.

10 2. The fiber optic cable of claim 1, the average residual angle being in the range of about 35 degrees to about 60 degrees.

3. The fiber optic cable of claim 1, the at least one strength member having a carbon content in the range of about 0.30 percent  
15 to about 0.75 percent.

4. The fiber optic cable of claim 1, the at least one strength member having an average percentage of the bend retained in the range of about 15 percent to about 35 percent during a bending  
20 test using a mandrel to wire ratio (D/d) of about 200.

5. The fiber optic cable of claim 1, the at least one strength member being annealed to reduce work hardening of the at least one strength member.

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6. The fiber optic cable of claim 1, the at least one strength member having a coating.

7. The fiber optic cable of claim 1, the fiber optic cable  
30 being a figure eight cable having a messenger portion and a carrier portion connected by a web.

8. The fiber optic cable of claim 6, the web having a preferential tear portion.

9. The fiber optic cable of claim 1, the at least one optical waveguide being selected from the group of a tight-buffered optical fiber, an optical ribbon, and a bundle of optical fibers.

10. The fiber optic cable of claim 1, the jacket being a material having fillers.

11. The fiber optic cable of claim 1, the cable being a dry design.

12. A fiber optic cable comprising:

a carrier portion, the carrier portion having at least one optical waveguide;

a messenger portion, the messenger portion having at least one strength member, the at least one strength member being a steel with a carbon content in the range of about 0.30 percent to about 0.75 percent; and

a jacket, the jacket forms part of a carrier jacket and part of a messenger jacket, and a web of the jacket connects the carrier jacket with the messenger jacket.

13. The fiber optic cable of claim 12, further comprising a second carrier section having at least one optical waveguide.

14. The fiber optic cable of claim 12, further comprising a second messenger section having at least one strength member.

15. The fiber optic cable of claim 12, the at least one strength member having an average residual angle in the range of about 30 degrees to about 65 degrees during a bending test using a mandrel to wire ratio (D/d) of about 200.

16. The fiber optic cable of claim 12, the at least one strength member having an average residual angle in the range of about 35 degrees to about 60 degrees during a bending test using a mandrel to wire ratio (D/d) of about 200.

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17. The fiber optic cable of claim 12, the at least one strength member being annealed to reduce work hardening of the at least one strength member.

10 18. The fiber optic cable of claim 12, the at least one strength member having a coating.

19. The fiber optic cable of claim 12, the web of the jacket having a preferential tear portion.

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20. The fiber optic cable of claim 12, the at least one optical waveguide being selected from the group of a tight-buffered optical fiber, an optical ribbon, and a bundle of optical fibers.

20 21. The fiber optic cable of claim 12, the jacket being a material having filled materials.

22. The fiber optic cable of claim 12, the cable being a dry design.

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23. The fiber optic cable of claim 12, the at least one strength member having an average percentage of the bend retained in the range of about 15 percent to about 35 percent during a bending test using a mandrel to wire ratio (D/d) of about 200.

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24. A fiber optic cable comprising:  
at least one optical waveguide;

at least one strength member, the at least one strength member being a steel that is annealed for relieving stress induced in the manufacturing process; and  
a jacket.

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25. The fiber optic cable of claim 24, the at least one strength member having a carbon content in the range of about 0.30 percent to about 0.75 percent.

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26. The fiber optic cable of claim 24, the jacket being formed from a polymeric material having fillers for reducing post-extrusion shrinkage.

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27. The fiber optic cable of claim 24, the at least one strength member having a coating.

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28. The fiber optic cable of claim 24, the at least one strength member having an average residual angle in the range of about 30 degrees to about 65 degrees during a bending test using a mandrel to wire ratio (D/d) of about 200.

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29. The fiber optic cable of claim 24, the at least one strength member having an average residual angle in the range of about 35 degrees to about 60 degrees during a bending test using a mandrel to wire ratio (D/d) of about 200.

30. The fiber optic cable of claim 24, the cable being a dry design.